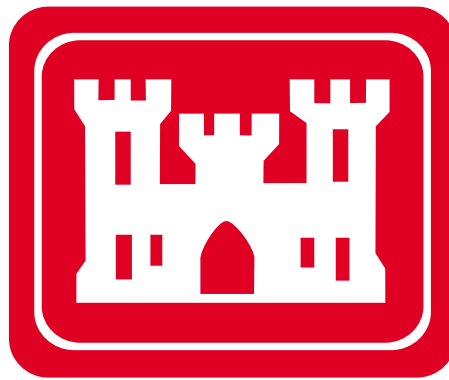


Revised

**Description of the
Proposed Action and Alternatives
For the Coastal Mississippi
Environmental Impact Statement**



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SECTION 1.0:**INTRODUCTION, PURPOSE, AND NEED****1.1 INTRODUCTION**

This is a United States Army Corps of Engineers (USACE) Environmental Impact Statement (EIS) undertaken in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), *Council on Environmental Quality Regulations Implementing the Procedural Provisions of the National Environmental Policy Act* (40 CFR Parts 1500-1508), and USACE regulations for implementing NEPA (33 CFR Parts 230 and 325). It has been prepared to address the environmental and socioeconomic consequences of developing and implementing a trends analysis-based “special-purpose methodology” to improve consistency and objectivity in the consideration of cumulative effects in environmental impact analyses associated with permit applications for large-scale development projects in coastal Mississippi.

For several decades prior to 1992, development in coastal Mississippi had occurred on a relatively small scale and has been localized to the areas immediately adjacent to the Mississippi Sound. In recent years, however, coastal Mississippi has experienced significant growth and development. This has been due, in large part, to the state’s authorization of dockside gaming casinos in 1992. Pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, in those instances in which proposed development projects would directly or indirectly affect jurisdictional waters of the United States, developers are required to seek Corps of Engineers (Corps) permits. During the past 8 years, acting under its regulatory program authorities, the Corps has evaluated applications and issued several permits for gaming casinos and other large-scale development projects. In the permitting process, consideration of potential environmental effects has traditionally focused on the direct and indirect effects of individual projects. More recently, because of growing concerns over the secondary effects of induced growth and the incremental loss of sensitive resources such as wetlands and other coastal habitats, there has been a growing call for an improved understanding and consideration of the cumulative effects (see Sections 1.2 and 2.2.3, below) of all permits issued, as well as those of other, unrelated regional development activities.

The EIS addresses only a proposed action, i.e., development and implementation of a special-purpose permit evaluation methodology, that the Corps would be authorized to implement, acting within its statutory authority under Section 10 of the Rivers and Harbors Act of 1899 or Section 404 of the Clean Water Act of 1972. However, it is not within the statutory authority of the Corps to impose zoning restrictions or smart growth conservation practices in the region. It is for this reason that no proposal to evaluate the effects of implementing any of a range of such alternatives (e.g., smart growth, slow growth, restrictive zoning, etc.) for the study area can be made. Rather, the EIS will evaluate a range of growth scenarios (e.g., smart growth) that are likely to occur in the future as a result of implementing the special-purpose methodology.

1.2 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

The purpose of the proposed action is to allow for enhanced evaluation of the cumulative effects of large-scale development enabled by USACE permits, especially in those areas of coastal Mississippi considered to be sensitive from an environmental standpoint.

Cumulative effects are impacts on the environment that result from the incremental impact of various past, present, and future actions. Assessment of projects for which USACE permits are required must include consideration of cumulative effects. Accurate evaluation of cumulative effects is a task that relies on the gathering of substantial amounts of information. Although the permitting process over the past decade has attempted to take cumulative impacts into account, USACE believes there is a need for a better, more comprehensive approach and understanding of cumulative effects. This need could be met if a comprehensive regional trends analysis could be made available to local and regional planners, developers, the Corps, other regulatory agencies, and the public.

A major limitation of traditional cumulative effects analysis is that individual permit applicants typically assess only those cumulative effects closely related to their projects. Activities or projects not interrelated with the proposed action and more geographically distant are often ignored or evaluated qualitatively. The reason for this is two fold. First, individual applicants are reluctant to extend their cumulative effects consideration to areas not directly affected by or adjacent to their project due to the increased costs of conducting such an analysis. Second, because the actual impact of the proposed project is usually quite limited in terms of spatial and temporal impact, imposition of a regional-scale analysis for such projects would appear unreasonable and overly burdensome. These limitations, together with the rapid and significant economic and environmental changes to the Mississippi coastal region, compel the USACE to develop an alternative methodology so that it can more fully capture the cumulative effects of future large-scale development projects.

1.3 SCOPE

This EIS is a hybrid document with a scope that departs in several notable ways from a traditional NEPA analysis. Its scope is twofold: (1) to produce a comprehensive analysis of recent and reasonably foreseeable development trends and associated environmental conditions, and (2) to consider the effects of putting into place a tailored method for evaluating cumulative effects in environmental impact evaluations associated with future permit applications for large-scale developments in coastal Mississippi. This methodology is further described in Section 2.0, Proposed Action.

The trends analysis associated with the EIS identifies relevant documents, and projects coastal Mississippi development trends and their cumulative effects spanning the period 1992 to 2020. The EIS itself assesses the environmental and socioeconomic effects of developing and implementing a consistent methodology for conducting cumulative effects analyses that will rely on the results of the trends analysis in future Corps permit decisions on applications for large-scale development projects in coastal Mississippi requiring individual Corps permits.

Although a trends analysis can be a useful planning tool for a variety of local, state, regional, and federal entities, the use of this specifically tailored analysis by the Corps as an integral part of its proposed special-purpose methodology for evaluating permit applications for future large-scale developments in the study area is viewed by the Corps as an action that should be reviewed through the NEPA process. An added benefit of this approach is that future, project-specific NEPA analyses in the study area may be tiered from this document or, as appropriate, may incorporate by reference applicable portions of the EIS.

Several federal and state agencies have joined the Corps in preparation of this EIS. USACE is the lead agency, with the additional agencies participating in cooperating agency roles. These other agencies bring to the NEPA process information and experience in resource-specific areas, as well as an interest in

identification and analysis of the relevant issues. Federal agencies participating in preparation of this EIS are the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, National Marine Fisheries Service, Federal Highway Administration, and National Aeronautics and Space Administration. Participating state agencies are the Mississippi Secretary of State; Department of Marine Resources; Department of Environmental Quality; Department of Fisheries, Wildlife, and Parks; Department of Archives and History; and Department of Transportation.

An interdisciplinary team of environmental scientists, biologists, planners, economists, engineers, and historians has evaluated the proposed action and alternatives in the context of current permit application evaluation methods and procedures. Conditions existing as of 2000 provide the baseline (“present”) for evaluation of past, present, and reasonably foreseeable future actions contributing to development and environmental trends and cumulative effects. The proposed action is described in detail in Section 2.0, Proposed Action. Alternatives to the proposed action are presented in Section 3.0, Alternatives. Existing conditions are described in Section 4.0, Affected Environment. Environmental consequences of the proposed action and the results of the trends analysis are presented in Section 5.0, Environmental Consequences. The trends analysis will be provided in full as an appendix to the EIS.

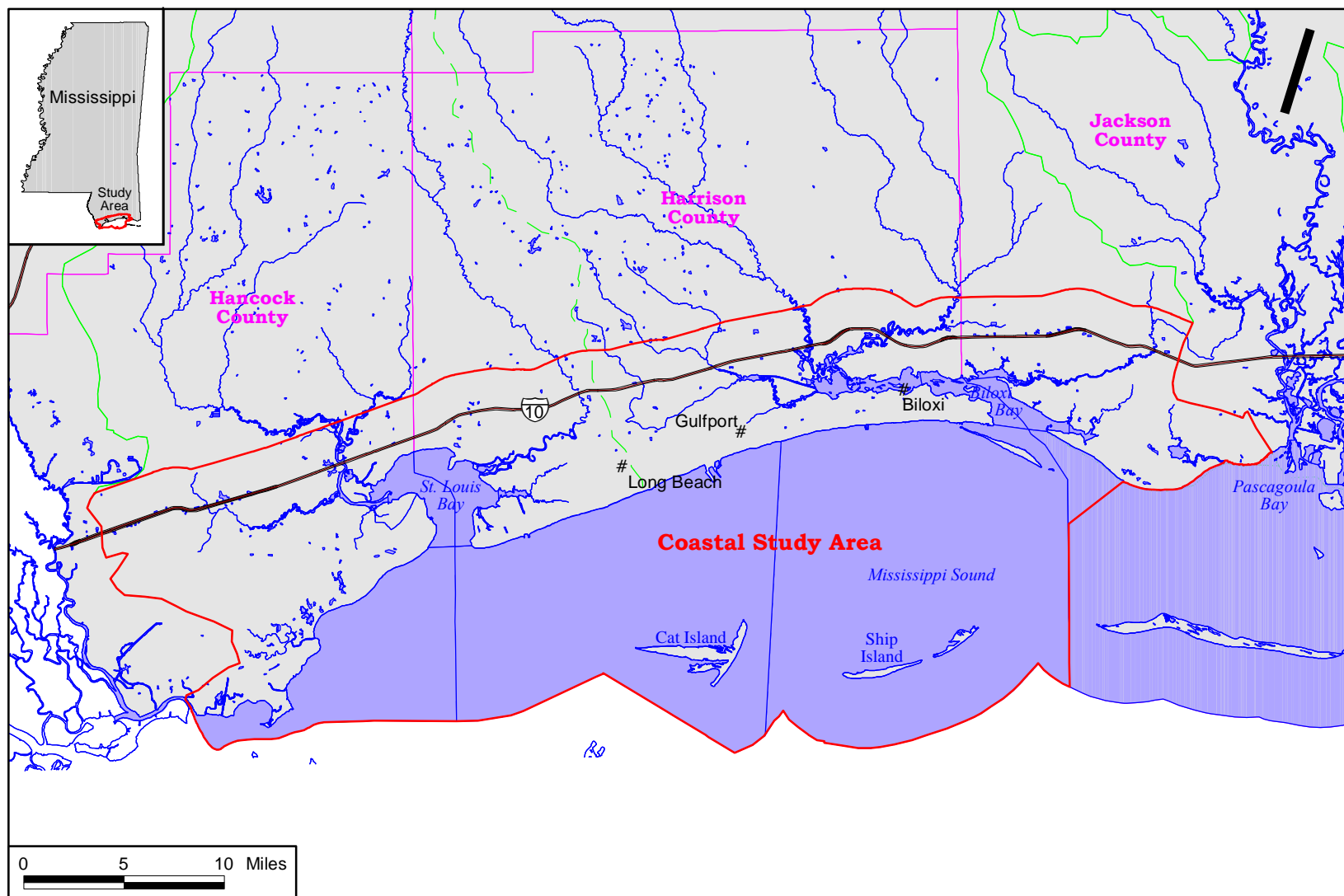
1.3.1 Study Area and Regions of Influence

Coastal Mississippi consists of Hancock, Harrison, and Jackson Counties. These counties lie adjacent to the Mississippi Sound in the northern area of the Gulf of Mexico between Louisiana and Florida. St. Louis Bay (Hancock County) and Back Bay (principally in Harrison County) are two major bays along the Mississippi Sound. Numerous estuaries and bayous are located in the coastal Mississippi area. Figure 1-1 shows the locations of these major features.

The state legislature enacted the Mississippi Gaming Control Act in 1990. Legalization of dockside gaming led to the advent of large-scale development of casinos in Mississippi Sound waters. Hancock and Harrison Counties authorized gaming within their jurisdictions, but Jackson County has not. To date, 11 of 12 operating gaming casinos in Coastal Mississippi are located in Harrison County. Most of the gaming casinos are in the city of Biloxi in eastern Harrison County, placing them close to Jackson County. Figure 1-2 shows the corporate limits of principal municipalities and locations of gaming casinos in the coastal counties.

[Preparers Note: Figure 1-2 is still under construction.]

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act of 1972, USACE, through its Mobile District office, issues permits for all areas of the coastal counties. To date, most large-scale development permits have been for projects clustered along the coastline between the Gulf and Interstate 10, where the majority of growth has occurred. Although large-scale development to date has occurred primarily south of Interstate 10, constraints such as availability of land and infrastructure render it likely that future development will increasingly be sited north of Interstate 10.



LEGEND

- ▬ Coastal Study Area
- ▬ USGS Hydrologic Unit
- ▬ County Boundary

Source: CEI, 2000.

Coastal Study Area Mississippi Coastal EIS

Figure 1-1

Gaming casino and other large-scale development in Harrison County has induced considerable growth and resulted in substantial effects in Jackson County west of the Pascagoula River delta. Many residents in Jackson County, especially those in the vicinity of Ocean Springs, work in the casinos in Harrison County. State Highway 59, which connects Interstate 10 and U.S. Highway 90 (along which many casinos are located in Biloxi), is a major roadway that passes through Ocean Springs in Jackson County. The western edge of Jackson County abuts Back Bay, one of the two major bays along the coast. These factors link Harrison and Jackson Counties.

Based on the foregoing, the primary area for study of cumulative effects of large-scale development is Hancock County, Harrison County, and that portion of Jackson County west of the Pascagoula River. The various relevant environmental resources, however, are not precisely confined by the limits of the study area as defined by political boundaries and geographic features. For instance, evaluation of impacts on surface water quality more logically proceeds on a watershed basis (with the study area encompassing the entire Coastal Mississippi Watershed which extends as far north as Pearl River, Stone, and Lamar counties), and evaluation of wildlife species necessitates consideration of a species' range. Where appropriate to a particular environmental resource, USACE has identified a region of influence (ROI). For each of the resources addressed in Section 4.0 (Existing Environment), USACE identifies the ROI for which data are gathered and analyzed.

1.3.2 Resource Areas

The human and natural environments consist of many components. Evaluation of the cumulative effects of large-scale development focuses on those components that bear on the ecological system and permit quantification. USACE has identified the following components of the human and natural environments for analysis:

- Coastal processes
- Geology and soils
- Hydrology
- Water resources
- Biological resources
- Air quality
- Noise
- Cultural resources
- Transportation
- Infrastructure
- Land use
- Socioeconomics
- Quality of life
- Environmental justice

1.3.3 Large Scale Development

Permits under Section 10 of the Rivers and Harbors Act of 1899 basically pertain to obstructions or structures placed in navigable waters. Permits under Section 404 of the Clean Water Act of 1972 deal with the discharge of dredged or fill material into the “waters of the United States,” including, specifically, wetlands. The Mobile District office of the Corps issues more than 4,000 permits each year to applicants whose projects require evaluation pursuant to the provisions of Section 10, Section 404, or both. Although only a fraction of the permits pertain to “large-scale” projects, those projects represent a notable potential for environmental degradation because of the size of the areas affected and the variety and magnitude of induced effects.

The Notice of Intent (NOI) for preparation of the Coastal EIS provided examples of large-scale projects in coastal Mississippi since 1992 for which USACE has issued permits under Section 10 or Section 404. There is no statutory or regulatory definition of what constitutes a “large-scale” development project. In its discretion, USACE identifies as “large-scale” those projects that affect more than 5 acres of wetlands.

1.4 PUBLIC INVOLVEMENT AND SCOPING

1.4.1 Public Involvement

Public participation in the NEPA process promotes open communication between the public and the Corps and, consequently, better decision-making. Persons and organizations having a potential interest in the proposed action, including minority, low-income, disadvantaged, and Native American groups, have been urged to participate in the environmental impact analysis process.

Public information and participation have included USACE publication in the *Federal Register* of a notice of intent to prepare the EIS and hosting of public scoping meetings.

1.4.2 Public and Agency Scoping

Public scoping meetings were held in Gulfport, Mississippi, on May 16, 2000, and Bay St. Louis, Mississippi, on May 18, 2000. USACE also hosted an agency scoping meeting in Gulfport on May 17, 2000. The draft EIS will be published for public and agency review and comment.

In conducting scoping for this EIS, USACE solicited both oral and written comments from various federal, state, and local agencies and the public. Issues brought to the Corps’s attention include:

- Appropriateness of the proposed action.
- Definition of the study area, including consideration of Jackson County.
- Adequacy of community infrastructure (e.g., roads, potable water, sewage treatment, landfills).
- Concern for secondary and cumulative impacts of large-scale development projects, both existing and pending.
- Preservation of community and environmental amenities in the coastal Mississippi area.
- Need for preservation of wetlands and effective mitigation when wetlands are affected by development projects.
- Mississippi Sound water quality, including bayous and estuaries.

- Carrying capacity of coastal Mississippi for new development.
- Potential for large-scale development projects having environmental justice impacts.
- Consideration of effects on cultural resources such as coastal Mississippi's fisheries heritage.
- Essential fish habitat.
- Adequacy of emergency evacuation capabilities.
- Availability of labor in local areas.
- Chemical contamination in bayous and rivers.
- Preservation of floodplains.

USACE has considered each of the foregoing representative issues for inclusion in the EIS. The wide array of resource areas urged for consideration by the public and agencies, however, exceeds the resources available to enable their inclusion in the EIS. To maintain focus on those matters most likely to shed light on the future evaluation of cumulative impacts, numerous related but tangential issues are addressed qualitatively or excluded from the analysis. A scoping report was prepared as an adjunct to the preparation of the EIS. The scoping report summarizes the breadth of matters brought to the Corps's attention and identifies those areas believed most to warrant inclusion in the analysis.

1.5 REGULATORY AUTHORITIES AND PROCESSES

State and local regulatory agencies have primary jurisdiction in land use and development matters within their political boundaries. The Corps becomes involved when a proposed project requires a permit under Section 10 of the Rivers and Harbors Act of 1899 or Section 404 of the Clean Water Act of 1972. Because the Mississippi Gaming Control Act requires that all gaming casinos be "dockside," siting of a casino in the water necessitates USACE's issuance of a permit under Section 10 and Section 404. Sizable proportions of the lands along coastal Mississippi are wetlands. These factors result in USACE's involvement, through the permitting process, in development activities in coastal Mississippi.

The Rivers and Harbors Act protects navigable waters and maintains interstate commerce. Section 10 of the act prohibits the creation of obstructions to navigation in waters of the United States and authorizes the Corps to regulate the construction of structures in, over, or under navigable waters, excavation of materials from navigable waters, or deposition of material into navigable waters, including dredging and filling activities. Section 404 of the Clean Water Act authorizes USACE to regulate the discharge of dredge or fill materials in waters of the United States, including wetlands. The Corps and the Environmental Protection Agency jointly administer Section 404 insofar as the Corps acts on permits in accordance with guidelines developed by USEPA for assessing environmental effects of proposed projects.

USACE issues five types of individual or general permits:

Individual permits

1. *Standard permits.* A standard permit is one that is processed through the public interest review procedures (see below), including public notice and receipt of comments. The standard individual permit is embodied in Engineering Form 1721.

2. *Letters of permission.* A letter of permission is issued in letter form and identifies the permittee, the authorized work and its location, the statutory authority, limitations on the work, a construction time limit, and a requirement for a report of completed work. A copy of relevant general conditions from Engineering Form 1721 is attached to the letter of permission.

General permits

3. *Regional permits.* A regional permit is a type of general permit issued after compliance with specified USACE regulations published at 33 CFR Part 325. If the public interest so requires, the permit may require a case-by-case reporting and acknowledgment system. No other separate applications or authorization documents are required.
4. *Nationwide permits.* Nationwide permits represent Department of the Army authorizations that have been issued at 33 CFR Part 330 for certain specified activities nationwide. If certain conditions are met, the specified activities can take place without the need for an individual or regional permit.
5. *Programmatic permits.* A programmatic permit is a type of general permit founded on an existing state, local, or other federal agency program and designed to avoid duplication with that program.

The Corps is neither a proponent nor opponent of any permit application. The decision to issue a permit is based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impact that the proposed activity might have on the public interest requires a careful weighing of all the relevant factors in each particular case. The benefits that reasonably may be expected to accrue from the proposal are balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process. That decision should reflect the national concern for both protection and utilization of important resources. All factors that might be relevant to the proposal must be considered, including the cumulative effects thereof. Among these factors are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. For activities involving Section 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with guidelines issued by the USEPA.

USACE considers three general criteria in evaluation of every permit application: (1) the relative extent of the public and private need for the proposed structure or work; (2) where there are unresolved conflicts as to resource use, the practicality of using reasonable alternative locations and methods to accomplish the objectives of the proposed structure or work; and (3) the extent and permanence of the beneficial or detrimental effects the proposed structure or work is likely to have on the public and private uses for which the area is suited. The weights of each of these factors may vary with each proposal.

USACE adds special conditions to permits when such conditions are necessary to satisfy legal requirements or to otherwise satisfy the public interest requirement. Permit conditions are directly related to the impacts of the proposal, appropriate to the scope and degree of those impacts, and reasonably enforceable. If the Corps determines that special conditions are necessary to ensure the proposal will not

1 be contrary to the public interest, but that those conditions would not be reasonably implementable or
2 enforceable, the permit is denied.

SECTION 2.0:

PROPOSED ACTION

2.1 INTRODUCTION

The National Environmental Policy Act of 1969 (NEPA) declares the national policy to encourage a productive and enjoyable harmony between man and his environment. To the fullest extent possible, the policies, regulations, and public laws of the United States are to be interpreted and administered in accordance with the policies set forth in NEPA. Among these is that all agencies of the federal government are to ensure that currently unquantified environmental amenities and values be given appropriate consideration in decision making along with economic and technical considerations.

NEPA requires analysis of every major federal action significantly affecting the quality of the human environment. Compliance with NEPA accompanies USACE action on each permit application under Section 10 of the Rivers and Harbors Act of 1899 or Section 404 of the Clean Water Act of 1972. USACE achieves compliance with NEPA by preparation of an environmental impact statement or an environmental assessment or by use of a categorical exclusion indicating that, based on experience with such proposals, significant impacts are not expected to result from the project.

Compliance with NEPA for all permitted projects in coastal Mississippi has to date focused on the merits of each individual project. The high degree of growth in coastal Mississippi was not accurately predicted in the early 1990s (*citation of Oivanki article*). NEPA documentation to date for individual projects has not appeared to fully capture the magnitude or importance of regional long-term cumulative effects. This is no doubt due, in part, to the manner in which projects for individual permittees have been evaluated. That is, the temporal and spatial boundaries for individual projects have been set in close proximity to each project, and thus there has been inadequate consideration of regional, long-term effects. An enhanced analysis and understanding of regional long-term cumulative impacts—outside the confines of a permit application for any single project—is needed. The proposed action is intended to enhance the Corps's understanding of cumulative effects in the study area resulting from past, present, and reasonably foreseeable regional development and other trends affecting environmental quality and sustainability, as well as its ability to continue to make sound regulatory decisions in the public interest.

2.2 STATEMENT OF THE PROPOSED ACTION

USACE proposes to develop and implement a specially tailored method for reviewing permits (special purpose methodology), based in part on a comprehensive regional trends analysis, that would provide consistent and objective consideration of cumulative effects in environmental impact analyses associated with permit evaluations for future large-scale development projects in coastal Mississippi for which a Corps of Engineers individual permit is required.

This EIS does not analyze any particular proposal for which an applicant has sought or might seek a permit. Rather, the EIS, through the trends analysis, considers actions in the study area since 1992, known pending actions, and postulated future actions in order to provide, by means of the proposed special-purpose methodology, a more informed understanding of the cumulative effects of large-scale regional development in coastal Mississippi.

2.2.1 Trends Analysis

The technical approach for conducting the trends analysis is presented in Appendix B, *Trends Analysis Plan*. Major features of this approach are described below.

Temporal scope. USACE employs two principal time frames for the trends analysis. The first occurs from 1992 until 2000 and serves as a benchmark for measuring rate of growth in the past. The second occurs from 2000 until 2020. The year 2000 serves as the baseline year for the study. The year 2020 is the endpoint for which trends and cumulative effects will be projected.

Simulation of change. The key indicators of growth to be simulated are land cover changes, socioeconomic parameters (e.g., economic output, population), and resource conservation strategies employed within defined areas for the year 2020. These simulations are used as inputs for various resource-specific predictive models to characterize resource conditions in 2020.

Three growth scenarios. The trends analysis relies on three growth scenarios: *slow growth* (relative to historical trends), *status quo* (current growth levels), and *high growth* (relative to historical trends).

Evaluation of conditions. The trends analysis examines six permutations of growth, in that each of the three growth scenarios has two variants. The first variant assumes growth proceeds in the presence of existing regional conservation practices (RCPs) (i.e., mitigation measures within the province of each locality to influence the quality of the environment). The second variant employed assumes growth proceeds with “smart growth” RCPs. In this case, it is assumed that localities impose and enforce an optimal regime of controls benefiting the natural and human environments.

Spatial scope. The spatial scope of the trends analysis depends on the resource area being evaluated. Generally speaking, study areas may exceed the immediate coastal area when areas outside the coastal area substantially influence conditions of resources along the coast. For example, water quality along coastal Mississippi is influenced not only by activities along the coast, but also substantially by activities in the entire watershed of each bay.

2.2.2 Special-Purpose Methodology

The Corps’ proposed special-purpose methodology builds on existing local permit applications and review procedures and Corps regulations for NEPA compliance in performing regulatory program functions (33 CFR Parts 230 and 325). Adoption by the Corps of this methodology is not intended to change or lengthen the permit application process. Rather, these procedures should significantly enhance the cumulative effects analyses provided in environmental documentation for large-scale development projects, thereby effectively reducing the potential for delays in permit decisions (as well as project implementation, if approved). Furthermore, implementation of the proposed action will provide a conduit for advice on RCPs that could help reduce negative effects of regional development.

As proposed, the new methodology is outlined below.

- Conduct a trends analysis based, in part, on the data and studies conducted by Mississippi Department of Marine Resources (MSDMR) under the Coastal Resource Management Planning effort. The primary objectives of the trends analysis are to:

- Evaluate long-term, regional cumulative effects from past, present and potential future growth;
- Evaluate RCPs that have been or could be implemented by state or local authorities, as well as additional permit conditions that could be implemented by applicants; and
- Provide guidance for tiering from this analysis for conducting more comprehensive cumulative effects analyses associated with individual large-scale permit applications.
- Provide the data, methods, and results of the trends analysis to agencies and permit applicants for the purpose of enhancing future analyses of regional cumulative effects and enhancing future regional conservation planning efforts.
- Provide guidance to permit applicants for tiering cumulative effects analyses for individual large-scale permit applications using the methodology and/or results of the trends analysis.
- Use the results and recommendations of the trends analysis and future regional conservation planning efforts to evaluate, in part, the adequacy of environmental documentation and mitigation strategies outlined in individual large-scale permit applications.
- As necessary, apply adaptive management strategies in updating the trends analysis, RCPs, and cumulative effects guidelines.
- As necessary, obtain clarification/additional information from applicants regarding the cumulative effects associated with large-scale permit applications.
- Use the results of the process in making the public interest determination on the applicant's proposal.

2.2.3 Guiding Principles

The Corps's evaluation of cumulative effects using the results of the trends analysis will be undertaken in light of eight guiding principles. These principles were promulgated by the Council on Environmental Quality in 1997 in *Considering Cumulative Effects Under the National Environmental Policy Act*, a handbook intended to provide federal agencies a framework for advancing environmental impact analysis by addressing cumulative effects. The handbook notes that although while agencies routinely address the direct and indirect effects of their proposed actions on the environment, analyzing cumulative effects is more challenging, primarily because of the difficulty in defining geographic (spatial) and time (temporal) boundaries. The CEQ's eight principles are as follows:

1. Cumulative effects are caused by the aggregate of past, present, and reasonably foreseeable future actions.
2. Cumulative effects are the total effect, including both direct and indirect effects, on a given resource, ecosystem, and human community of all actions taken, no matter who (federal, nonfederal, or private) has taken the actions.
3. Cumulative effects need to be analyzed in terms of the specific resource, ecosystem, and human community being affected.

- 1 4. It is not practical to analyze the cumulative effects of an action on the universe; the list of
2 environmental effects must focus on those that are truly meaningful.
- 3 5. Cumulative effects on a given resource, ecosystem, and human community are rarely aligned with
4 political or administrative boundaries.
- 5 6. Cumulative effects can result from the accumulation of similar effects or the synergistic interaction
6 of different effects.
- 7 7. Cumulative effects can last for many years beyond the life of the action that caused the effects.
- 8 8. Each affected resource, ecosystem, and human community must be analyzed in terms of its capacity
9 to accommodate additional effects, based on its own time and space parameters.

SECTION 3.0: ALTERNATIVES

3.1 INTRODUCTION

The USACE proposed action is described in Section 2.0. Alternatives USACE considered include (1) the Proposed Action, including development and use of a comprehensive trends analysis, and (2) deferral,¹ on development trends and cumulative effects matters, to appropriate state, regional, and/or local agencies, within the constraints of the law, including passage of any enabling legislation that might be required. This alternative can be divided into two subalternatives, one of which would have the Corps prepare the trends analysis, the other of which would involve no Corps-prepared trends analysis. The “no action” alternative required by Council on Environmental Quality regulations, which also will be evaluated, would consist of the Corps’s continuing to evaluate cumulative effects on an ad hoc basis. The trends analysis would not be considered. These alternatives are discussed in further detail below.

3.2 PERMIT REVIEW METHODOLOGY AND COMPREHENSIVE TRENDS ANALYSIS

Preparation of a comprehensive trends analysis and development and implementation of a special-purpose permit evaluation methodology constitute the Proposed Action described in Section 2.0. This is the Corps’s preferred alternative for consideration of cumulative effects associated with the permitting of large-scale development projects in coastal Mississippi.

3.3 DEFERRAL TO STATE/LOCAL AGENCIES

Coastal Mississippi applicants for permits for activities subject to Section 10 or Section 404 submit a *Joint Application and Notification* to the Corps.² In evaluating each permit application, USACE weighs the many factors described in Section 1.6, prior to taking its final action.

The Corps invites public and agency comment on all permits. Agency views are accorded due weight because they reflect the expert opinion of officials who have both subject matter expertise and responsibility for the types of actions at issue.

It would be possible for USACE to provide trends analysis information to state and local agency officials or to a state-empowered and jointly staffed regional agency and to solicit their views on whether permits should be issued based on their evaluation of cumulative effects matters. However, three principal factors render this alternative impracticable. First, various state and local agencies and their federal counterparts reasonably could draw opposing conclusions concerning cumulative effects based on the same data. In such case, the Corps would have to decide among the differing agencies’ recommendations in a process little different from the approach currently used. Second, no state-empowered regional development or

¹ In common usage, defer means either to put off to another time or to yield in judgment or opinion. USACE intends only the latter use of the word to pertain in this document.

² Copies of applications are provided to the Mississippi Department of Wildlife, Fisheries and Parks, Bureau of Marine Resources; Mississippi Department of Environmental Quality, Bureau of Pollution Control; and Mississippi Department of Marine Resources.

1 environmental protection authority currently exists that can override other state and local agencies on
2 development decisions. Third, decision making on permit applications ultimately resides solely within the
3 discretion of the Corps. Absent congressional action granting such authority, acceptance of state and
4 local recommendations as binding on USACE decisions could represent an impermissible compromise of
5 the independent responsibility and judgment entrusted to the Corps. Because of these factors, and the
6 time that would be required to change them, adoption of an alternative predicated on deferral to state and
7 local agency judgment is not feasible and, therefore, is not further examined in this EIS.

8 **3.4 NO ACTION**

9 Under the no action alternative, the Corps would not develop and implement the proposed methodology
10 using the trends analysis. USACE would continue to perform cumulative effects analysis for permits on
11 an ad hoc basis. Inclusion of the CEQ-required no action alternative in the EIS also will serve as a
12 benchmark against which the proposed action and alternatives can be evaluated.